Teaching NeuroImages: Variant of Guillain-Barré syndrome with spinal cord involvement

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Variant of Guillain-Barré syndrome with spinal cord involvement

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Dr. C. Gächter: drafting of manuscript and analysis / interpretation of general neurological findings

Dr. J. Petersen: interpretation of electroneurography findings, critical revision of the manuscript for important intellectual content

Dr. U. Schwarz: analysis and interpretation of clinical findings

Dr. A. Pangalu: analysis and interpretation of MR-images

Dr. A. Tarnutzer: analysis and interpretation, study supervision, critical revision of the manuscript for important intellectual content

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Neuroimage

A 48-year-old man presented with ascending sensory deficits over 12 hours, followed by urinary retention. He had areflexia, mild lower extremity weakness, sensory ataxia, and a T2 sensory level. Smooth pursuit was impaired, but cranial nerves were otherwise normal. Diagnostic evaluation demonstrated CSF cytoalbuminologic dissociation and demyelinating polyneuropathy fulfilling the electrodiagnostic criteria for Guillain-Barré Syndrome (GBS).[1] Laboratory evaluation was normal, including vitamin B12; anti-NMO, anti-neuronal and ganglioside antibodies; and oligoclonal bands. Myelopathy was confirmed on MRI (Fig 1). This case highlights that acquired acute demyelination may rarely affect the peripheral and central nervous system simultaneously ("GBS- transverse-myelitis overlap syndrome"), likely related to common auto-immune mediated pathomechanisms.[2]

Fig1: Title: Spinal MRI one week after symptom onset. MR imaging of the spine demonstrated longitudinal (Panel A, sagittal plane) T2-hyperintensities (C7/T1 to T3) affecting the dorsal columns more than the lateral columns (Panel B, axial image at the level of T2).

References

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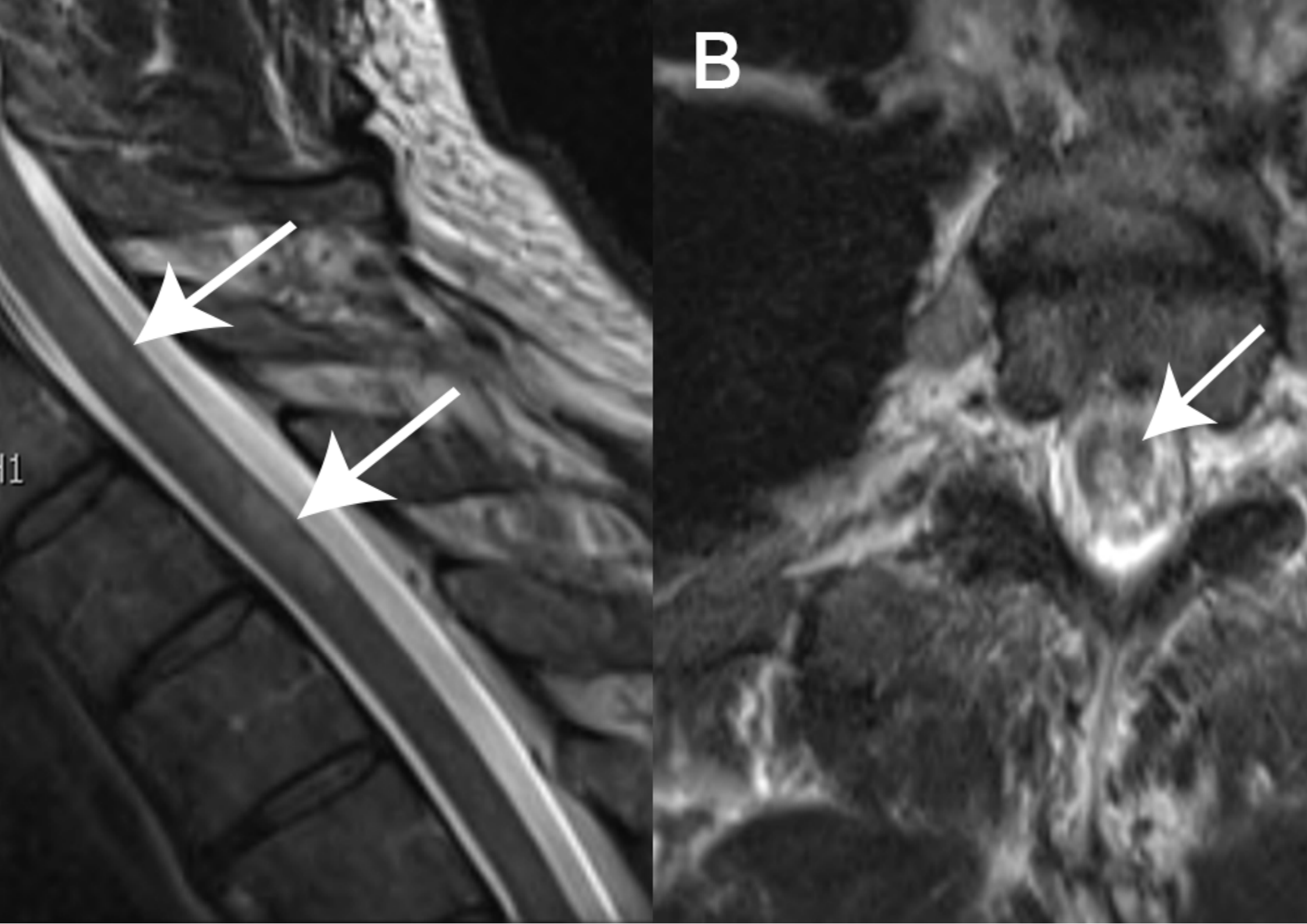
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